

4.12 UTILITIES AND SERVICE SYSTEMS

Based on the findings of the IS, the proposed West Gateway project may or would result in potentially significant adverse impacts public services and utilities in the areas of fire and police services, schools, water supply, waste water, solid waste disposal and storm water drainage (refer to Section 4.6 Hydrology and Water Quality for the drainage discussion). The analysis in the following sections focuses on the existing conditions in the study area, the analysis methodology, thresholds of significance, potential impacts of the West Gateway project related to public services and utilities, and mitigation as needed. This Section describes existing public services for the proposed project area and addresses potential project impacts on the availability and capacity of the local providers for the following:

- Fire protection and emergency services
- Police Protection
- Schools
- Libraries
- Electricity
- Natural gas
- Water supply
- Wastewater
- Solid waste
- Communication systems

4.12.1 EXISTING SETTING RELATED TO UTILITIES AND SERVICE SYSTEMS

Fire Protection and Emergency Services

Fire protection, prevention and emergency medical services for the project site and vicinity are provided by the Long Beach Fire Department (LBFD). The Fire Department comprises four bureaus, consisting of the Administration, Fire Prevention, Operations and Support Services each bureau reports to the Fire Chief. Each bureau is further broken down into divisions. The Operations Bureau consists of the Emergency Medical Services Division (EMS) and the Marine Safety Division (MSD) and is responsible for all field operations including fire suppression, emergency medical response, the lifeguard duties and fire/non-fire response activities. The Marine Safety/Lifeguard Division is responsible for nine miles of beaches, 5,300 acres of oceanfront property, waterways and marinas in the City of Long Beach. Additionally, the MSD is responsible for responding to water emergencies in the City's rivers, lakes and marinas.

The LBFD employees 502 total uniformed personnel including three Deputy Chief, two Assistant Chiefs, 12 Battalion Chiefs, 103 Captains, 93 Engineers, six Fireboat Operators, 237 Firefighters and 27 Marine Safety officers.¹

There are four fire stations within initial response distance to the project site. The location and response distance to the project site from each of these stations is provided in Table 4.12-1.

¹ City of Long Beach Fire Department website, www.ci.long-beach.ca.us/fire, October 2004.

TABLE 4.12-1
CITY OF LONG BEACH FIRE DEPARTMENT RESOURCES

Station No.	Location	Response Distance[*]
1	100 Magnolia Avenue	0.01
2	1645 E. 3 rd Street	1.5
3	1222 Daisy Avenue	1.4

Source: City of Long Beach Fire Department website, www.ci.long-beach.ca.us/fire

The LBFD goal is to arrive at any incident within the City (fire and medical emergency) within five minutes consistent with the National Fire Protection Association Handbook Standards 1900 and 1700. (Source: Long Beach Fire Department).

Police Protection

Law enforcement services are provided by the City of Long Beach Police Department (LBPd), headquartered in the Downtown Civic Center complex, less than 1 mile from the project site. The LBPd is divided into four Bureaus which consist of Administration, Investigations, Patrol and Support. Each Bureau has a specific role in policing the community. The City of Long Beach is divided into four Patrol Divisions which include; North Patrol Division, South Patrol Division, East Patrol Division, West Patrol Division and Field Support. The project area is served by the South Patrol Division.

The South Patrol Division is staffed by sworn officers and non-sworn personnel which include supervisors, sworn administrative staff, patrol beat officers and community policing officers. The average response time in the South Patrol Division service area for emergency calls is based on the classification of the calls. Police units are dispatched to a scene based on level of threat. Priority I dispatch time is defined as an imminent threat to life and/or property, or a crime of a serious nature is in progress. Priority II dispatch time is defined as when a threat to the general well being of a person or property, or a disturbance of the peace is occurring. Priority III dispatch time is defined as when there is no threat to life or property, and a delay would not cause undue harm to a citizen or property. Priority IV is defined as other routine calls. The average response time goal for the Police Department is five minutes from the time a call is received at the Dispatch Center.²

The Investigations Bureau of the LBPd is comprised of three divisions; Detective Division, Gang and Violent Crimes Division and Youth Services Division. The Investigations Bureau is made up of six 24-hour on-call teams which include the Sexual Assault Response Team, Homicide Investigations Team, Domestic Abuse Response Team, Crime Lab Response Team, the Child Abuse Response Team, and the Gang Investigation Team for gang related crimes.

The Communications Division of the LBPd receives and processes all emergency 911 calls as well as non-emergency calls. The Communications Division is the designated public safety

² City of Long Beach Police Department, <http://www.longbeach.gov/police>, October 2004.

answering point (PSAP) in the City of Long Beach.³

The City participates in the Los Angeles County Law Enforcement Mutual Aid Organization which is overseen by the County's Sheriff's Department. In the event that mutual aid is required, the Emergency Operations Bureau of the Sheriff's Department is notified. The California State University Police, Long Beach Community College Police, Veteran's Hospital Police and the United States Coast Guard are also available for mutual aid, if needed.

Schools

The project site is served by the Long Beach Unified School District (LBUSD). LBUSD comprises 95 public schools in the cities of Long Beach, Lakewood, Signal Hill, and Avalon on Catalina Island. LBUSD is the third largest school district in California serving over 97,000 students. LBUSD is the largest employer in the City of Long Beach.

LBUSD has numerous schools including elementary, middle and high schools, serving the student population in the downtown Long Beach area. However, LBUSD has stated that the existing condition in the downtown area is over crowded warranting bussing of students to less crowded schools further away from downtown. Therefore, it is likely that schools away from the downtown area will provide services for the student population in the West Gateway development. Figure 4.12-1 shows the existing school facilities in LBUSD.

School Funding

The Schools Facilities Act (Government Code 65995) was enacted to allow school districts to assess developer fees to help cover the cost of constructing or reconstructing school facilities necessary to accommodate increases in student population. The Act also establishes maximum fees which can be collected (adjustable for inflation). The LBUSD has adopted impact fees for commercial/industrial uses at \$0.36 per square foot and \$3.85 per square foot for residences.

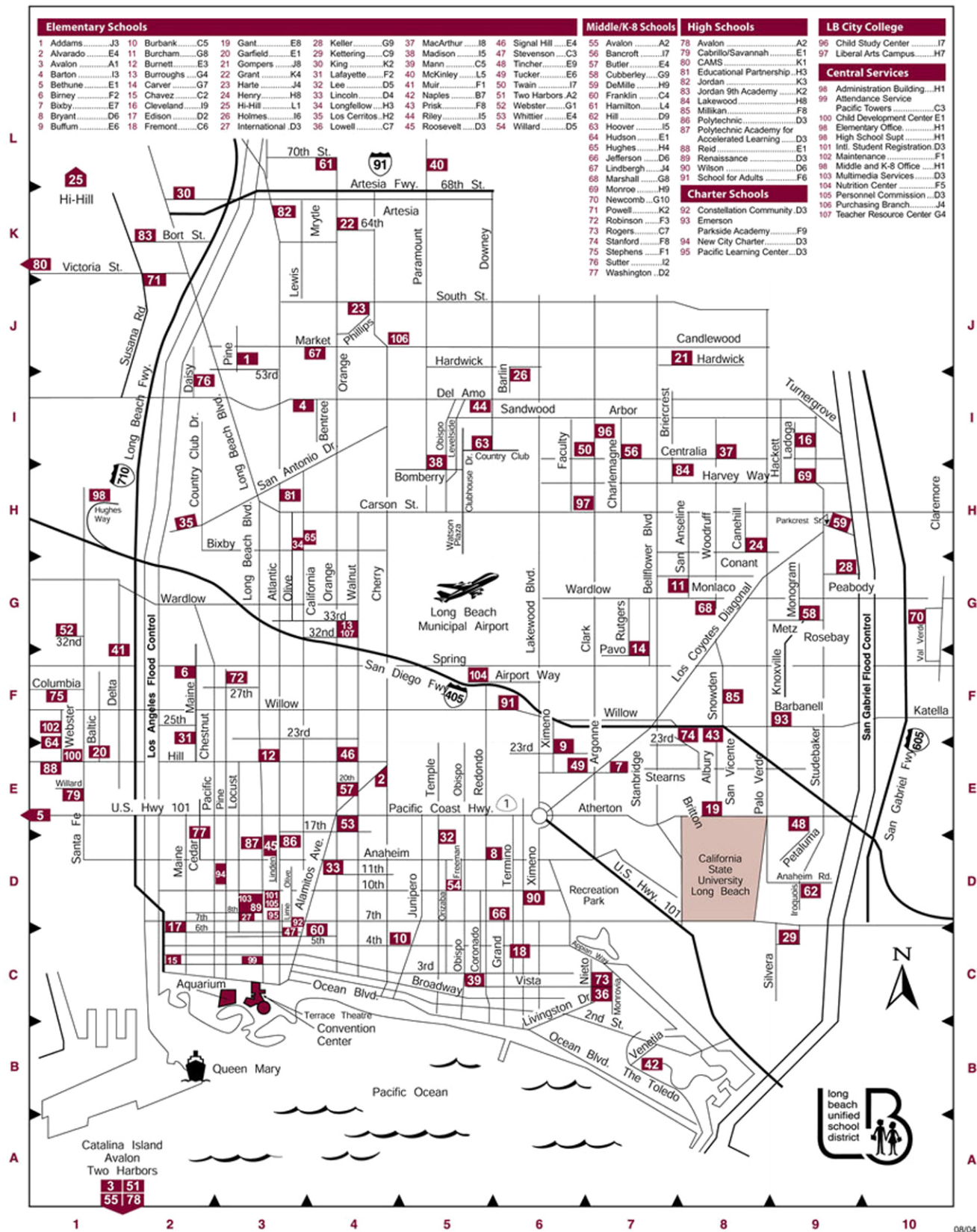
Libraries

The Main Library is located at 101 Pacific Avenue in the Long Beach Civic Center and would serve the project site and vicinity. In addition to the Main Library, the City of Long Beach has 11 other neighborhood libraries throughout the City. The Alamitos Branch Library located at 1836 E. Third Street is located close to the Main Library and the project area.

Electricity

Southern California Edison (SCE) provides electrical service to the project area including the project site. The project site and vicinity are already developed and urbanized as such there are existing electrical power lines located in the project vicinity and structures on the project site are currently receiving electric service from SCE.

³ Ibid.



Source: Long Beach Unified School District Website: http://www.lbusd.k12.ca.us/schools/school_finder/MapPage.asp (created 8/04, accessed 1/25/05)

Figure 4.12-1
Long Beach Unified School District Facilities

Natural Gas

Southern California Gas Company (SCGC) provides natural gas transmission and distribution facilities in the project area. Long Beach Energy (LBE) receives its gas supplies through SCGC transmission network and provides gas service to the City and the project area. The project site and vicinity are already developed and urbanized as such there are existing natural gas distribution mains in the project vicinity and the structures on the project site are currently receiving gas service from SCGC.

Water

The project site is currently receiving water service from the Long Beach Water District (LBWD). LBWD receives its drinking water from two sources, the large underground aquifer below the City of Long Beach known as the Central Basin, and from imported water delivered by the Metropolitan Water District (MWD) of Southern California. A small portion of the City's supply comes from reclaimed water, which is primarily used to irrigate large municipal landscapes. 42 percent of the City's total water supply is provided by groundwater wells. Pumps extract this groundwater from 26 different wells and deliver it to the LBWD groundwater treatment plant.

Approximately 50 percent of the City's total water supply is treated and provided by the MWD. The MWD is a consortium of twenty-six cities and water districts responsible for delivering water to nearly 17 million people in a 5,200-square-mile area of Southern California. MWD transports water from the Sacramento Delta in northern California, via the California Aqueduct, and from the Colorado River, via the Colorado River Aqueduct, to its customers in southern California. The majority of water Long Beach receives from the MWD is Colorado River Water.

Approximately 8 percent of the City's total water supply is reclaimed water. Reclaimed water is wastewater that has been fully treated by a three stage tertiary process for industrial and irrigation uses within the City of Long Beach. Reclaimed water is used for irrigation of the City's parks, golf courses, cemeteries, gardens, and nurseries. Other users include the California State University of Long Beach, Long Beach City College, the Long Beach Unified Schools District, and Caltrans for sites along the I-405 and I-605 Freeways.⁴

The Long Beach Water Reclamation Plan (LBWRP), owned and operated by the County Sanitation Districts of Los Angeles provides reclaimed water used for irrigation throughout the City. LBWRP has a current capacity of 25 million gallons per day (mgd), and currently treats flows that average about 21 mgd. During its daily flow patterns, peak flows have been recorded at over 35 mgd. Only about 30 percent of the plants effluent is currently reused. The effluent undergoes treatment, which includes primary sedimentation, activated sludge biological treatment, secondary sedimentation, coagulation, filtration, and chlorination.

Wastewater

⁴ General Plan Land Use & Mobility Elements Update Technical Background Report.

LBWD provides sewer service for the City of Long Beach including the project site. The LBWD operates and maintains approximately 765 miles of sanitary sewer line, delivering over 40 million gallons per day to Los Angeles County Sanitation facilities located on the north and south sides of the City of Long Beach. Treated sewage is used in one of three ways; to irrigate parks, golf courses, cemeteries, and athletic fields, to recharge the groundwater basin, and/or pumped into the Pacific Ocean.

Currently, a majority of the City's wastewater is delivered to the Joint Water Pollution Control Plant (JWPCP) of the Los Angeles County Sanitation District. The remaining portion of the City's wastewater is delivered to the Long Beach Water Reclamation Plant of the Los Angeles County Sanitation District. JWPCP is located at 24501 S. Figueroa Street, Carson, California. The plant occupies approximately 350 acres to the east of the Harbor (110) Freeway. The JWPCP is the largest of the Los Angeles County Sanitation Districts wastewater treatment plants. It provides advanced primary and partial secondary treatment for 350 million gallons of wastewater per day. The plant serves a population of approximately 3.5 million people, including most of the residents of the City of Long Beach. At JWPCP, the treated wastewater is disinfected with chlorine and sent to the Pacific Ocean through networks of outfalls that extend two miles off the Palos Verdes Peninsula to a depth of 200 feet. The Long Beach Water Reclamation Plant is located at 7400 E. Willow Street in Long Beach. The plant occupies 17 acres west of the San Gabriel River (I-605) Freeway. The plant provides primary, secondary, and tertiary treatment for 25 million gallons of wastewater per day. The plant serves a population of approximately 250,000 people, including a portion of the 460,000 residents of Long Beach. Almost 5 million gallons per day of the purified water is reused at over forty reuse sites.⁵

Solid Waste

Regulatory Setting

The California Integrated Waste Management Act (AB 939) established a hierarchy for integrated waste management to guide local agencies in implementation of the following in order of priority:

- Source reduction.
- Recycling and composting.
- Environmentally safe transformation land disposal.

This Act established the California Integrated Waste Management Board (CIWMB) and authorized the CIWMB to monitor and enforce the mandates of AB 939. AB 939 further established the Integrated Waste Management Plan (IWMP), which requires counties to establish a task force to coordinate the development of local jurisdiction Source Reduction and Recycling Elements (SRREs) and a countywide siting element. Each adopted SRRE contains programs and policies for fulfillment of the goals of AB 939. Required components of an SRRE include: waste characterization, source reduction recycling, composting, solid waste facility capacity, education and public information, funding, special waste, and household hazardous waste. In compliance

⁵ Ibid.

with AB 939, the City of Long Beach has initiated source reduction and recycling programs, including Household Hazardous Waste Disposal programs.

Landfills

The City of Long Beach Environmental Services Bureau provides solid waste collection services to approximately 109,000 residents and 5,600 businesses in the City. As indicated in Table 4.12-2, disposal facilities used by the City of Long Beach in 2002 include 11 different landfills and two transformation facilities in Southern California.

**TABLE 4.12-2
ACTIVE LANDFILLS**

Landfill	Location/County	Type of Facility	Permitted Capacity Tons per Day (TPD)	Estimated Closure Date
Arvin Sanitary Landfill	Kern	Class III	800	2008
Bradley Landfill West and West Extension	Los Angeles	Class III	10,000	2007
Chiquita Canyon Sanitary Landfill	Los Angeles	Class III	6,000	2019
Colton Refuse Disposal	San Bernardino	Class III	3,100	2006
Frank R. Bowerman	Orange	Class III	8,500	2022
Olinda Alpha Sanitary Landfill	Orange	Class III	8,000	2013
Prima Deshecha Sanitary Landfill	Orange	Class III	4,000	2067
Puente Hills	Los Angeles	Class III	13,200	2013
Scholl Canyon Sanitary Landfill	Los Angeles	Class III	3,400	2019
Simi Valley Landfill – Recycling Center	Ventura	Class 11, III	3,000	2022
Sunshine Canyon	Los Angeles	Class III	6,600	2011
Commerce Refuse-To-Energy Facility	Los Angeles	Transformation	1,000	N/A
Southeast Resource Recovery Facility (SRRF)	Los Angeles	Transformation	2,240	N/A

Source: Integrated Waste Management Board, February 2005.

The Southeast Resource Recovery Facility (SERRF) is located in the City of Long Beach and receives a majority of the City's wastes. SERRF is a refuse-to-energy facility that only accepts non-hazardous municipal solid waste. The refuse received at SERRF is incinerated in boilers, creating steam that is used to drive a turbine-generator which produces electricity. Some of the electricity produced is used to operate the facility and the remainder is sold to SCE for distribution to its customers. The steam used to drive the turbine-generator is then sent to a condenser where it is converted into water and recycled back through the boilers. This energy is used to power SERRF operations and the remainder is sold to the Southern California Edison Company for public use. SERRF processes an average of 1,290 tons of municipal waste per day from the City of Long Beach and surrounding communities. SERRF generates enough power

each year to supply 35,000 residential homes with electricity and has reduced the volume of solid waste entering a landfill by over four million cubic yards.⁶ The City receives a 10 percent waste diversion credit through use of the SERRF.

Communication Systems

Verizon provides telephone service to the City of Long Beach including the project site. Charter Communications currently provides cable television service to the City and project area. Internet service and cellular phone service is available from various providers. Each of the telecommunication providers offers a variety of plans and services to residential and commercial users in the City.

4.12.2 THRESHOLDS OF SIGNIFICANCE RELATED TO UTILITIES AND SERVICE SYSTEMS

Threshold significance criteria indicate that significant impacts would occur if the project would:

- Results in a need for the substantial expansion of existing facilities.
- Results in an increase in demand for services that could not be met by existing or planned resources.
- Results in an increase in emergency response time.
- Exceed wastewater treatment requirements or the applicable Regional Water Quality Control Board.
- Requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts.
- Requires or results in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts.
- Has sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- Results in the determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

⁶ Sanitation Districts of Los Angeles, <http://www.lacsd.org/swaste/Publications/SERRFBrochure.htm>, February 2005.

4.12.3 METHODOLOGY RELATED TO UTILITIES AND SERVICE SYSTEMS

Public Services and Utility Providers

Each public service provider and utility provider was contacted to determine if the proposed project would result in a significant adverse impact on the ability to provide services to the project site and surrounding area.

Wastewater

Wastewater impacts were evaluated by analyzing the amount of wastewater currently generated at project site and quantifying the increase of wastewater generated by the proposed project.

Solid Waste

Solid waste impacts were evaluated by analyzing the amount of solid waste currently generated at project site and quantifying the increase of solid waste generated by the proposed project.

4.12.4 IMPACTS RELATED TO UTILITIES AND SERVICE SYSTEMS

Fire Protection and Emergency Services

To ensure the safety of each project approved by the City, the Fire Department Fire Prevention Service office requires review and approval of the site plans of each new development before building permits may be issued. The proposed project will incorporate all required fire and life safety features in compliance with the Fire Department requirements, including full sprinkler systems in each building, all necessary fire lines and hydrants with appropriate fire flows, unobstructed fire emergency access to the buildings, all high-rise requirements and all other features required by the Fire Marshal.

In addition to equipment and personnel, Table 4.12-1 lists the distance of the project site from each City fire station. As indicated, two City fire stations are less than two miles from the project site. The City has automatic and mutual aid agreements with the neighboring cities should the need arise for emergency response beyond the capacity of the City Fire Department.

As stated in Section 4.9, the project's contribution of 853 apartment and condominium units would increase the population in the City by approximately 2,473.70 persons. The project's potential contribution to population growth in Long Beach is well within the adopted local and regional population growth projections provided in the City's Housing Element of the General Plan and SCAG's Regional Comprehensive Plan and Guide, respectively.

Fire Station No. 1, which is located on the Parcel 10 of the project site, is temporarily situated until the permanent Fire Station No. 1 renovation is complete. This is estimated to occur by fall 2005, prior to demolition activities for the proposed project. Therefore, no impacts will occur to Fire Station No. 1 because it will be vacated by the time the proposed West Gateway project

would be under construction.

The Initial Study identified potentially significant impacts to fire and paramedic services. Although the project will increase demand on the City's fire protection services, this demand will not require the construction of new facilities to maintain acceptable response times. However, the project may require additional fire staff at the existing fire stations. With additional staffing as provided through the payment of fees under Mitigation Measure U-8, the project impact on fire and paramedic services will be less than significant.

Police Protection

Implementation of the proposed project would introduce commercial and residential uses to the project site and increase the level of traffic in the project vicinity. The additional activity would generate an incremental increase in service demand for police protection services. In addition, the intensification of uses and the types of land uses, the Police Department expects an increase in crime on the project site. However, as required by the City, the project applicant(s) will be assessed a public safety impact fee for new buildings constructed on the site. In addition, to ensure public protection, security and officer safety, the Long Beach Police Department requires review and approval of site plans of each new development before building permits may be issued. Recommendations resulting from the project review by the City Police Department must be incorporated into the project.

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The Initial Study identified potentially significant impacts to police services. Although the project will increase demand on the City's police protection services, this demand will not require the construction of new facilities to maintain acceptable response times. However, the project may require additional police staff at the existing police facilities. With additional staffing as provided through the payment of fees under Mitigation Measure U-8, the project impact on police services will be less than significant.

Schools

The proposed project is anticipated to generate a total of 256 students, assuming 0.3 students per residential unit (Source: personal communication with Kevin Barry, LBUSD, 2/9/05). The schools which would serve the project site may not be local since LBUSD is at capacity in the Downtown Long Beach area (NOP comment letter from LBUSD dated July 26, 2004). LBUSD indicated in the letter that even with Cesar Chavez Elementary School becoming operational, local schooling needs in the Downtown area will not be met. Therefore, students in the new development may be bussed to schools further away with available capacity. Mitigation Measure U-7 requires notification of this fact as part of the title and deed disclosure documents. The schools which will receive the West Gateway student population will be determined by LBUSD

with the enrollment of each student and the availability of space. The addition of the 256 students contributes to an already impacted school district which will result in a significant impact and a cumulative impact on the provision of school services in the Downtown area.

Libraries

Implementation of the proposed project would increase the local residential population and result in the increase in demand for library services. However, the population increase due to the proposed project is not anticipated to result in the need for new library facilities and the proposed project would not affect the City's ability to provide library services. The proposed project would not result in a need to expand existing facilities or require the construction of a new library. However, the City's standard library fees associated with residential project will be levied on the project.

Electricity

The proposed project would increase the demand for electrical service in the project area. As shown in Table 4.12-3, the proposed project would generate demand for approximately 5.63 million kilowatts an hour (kWh) of electricity per year. This amount of electricity would be consistent with the amounts typically consumed by commercial, retail and residential uses in urban areas and would represent an incremental increase in the amount of electricity consumed in the region.

**TABLE 4.12-3
ESTIMATED ELECTRICITY CONSUMPTION**

Land Use	Estimated Project Development	Consumption Rate	Electricity Generated (million kWh/yr)
Residential	853 units	6,081 kWh/du/yr	5.18
Restaurant	7,500 sq. ft.	47.3 kWh/sq. ft./yr	0.36
Retail/Commercial	7,500 sq. ft.	11.8 kWh/sq. ft./yr	0.09
Total Estimated Electricity Generation (million kWh/yr)			5.63

Source: SCE.

kWh = kilowatt an hour; du = dwelling unit

As part of the proposed project, electricity conservation measures would be imposed through mandatory compliance with the Energy Efficiency Standards, as set forth in Title 24 of the California Administrative Code. In addition, it is a requirement for the developer to coordinate with local utilities such as SCE to ensure appropriate sizing and design of electrical provision to the site. Therefore, the impact of the proposed project related to electrical service would be less than significant; however, mitigation measures described below will ensure that the project is in compliance with these existing regulations and ensures coordination with SCE.

Natural Gas

The proposed project would increase the demand for natural gas service in the project area. As shown in Table 4.12-4, the proposed project would generate demand for approximately 3.504 million cubic feet (cf) of natural gas per month. This amount of natural gas would be consistent with the amounts typically consumed by commercial, retail and residential uses in urban areas and would represent an incremental increase in the amount of natural gas consumed in the region. In addition, it is a requirement for the developer to coordinate with local utilities such as SCGC to ensure appropriate sizing and design of natural gas provision to the site. SCGC indicated that the project's natural gas needs can be met without substantial expansion of existing facilities.

**TABLE 4.12-4
ESTIMATED NATURAL GAS CONSUMPTION**

Land Use	Estimated Project Development	Consumption Rate	Natural Gas Generated (million cf/mo)
Residential	853 units	4,105 cf/du/mo	3.5
Restaurant	7,500 sq. ft.	2.9 cf/sq. ft./mo	0.002
Retail/Commercial	7,500 sq. ft.	2.9 cf/sq. ft./mo	0.002
Total Estimated Natural Gas Generation (million cf/mo)			3.504

Source: SCGC, August 2004.

cf =cubic feet; du = dwelling unit

As part of the proposed project, natural gas conservation measures would be implemented through mandatory compliance with the Energy Efficiency Standards, as set forth in Title 24 of the California Administrative Code. On-site gas facility improvements for Parcels 9, 10 and 11 are shown in Figure 4.12-2. Therefore, the impact of the proposed project related to natural gas service would be less than significant.

Water

The project would be served from the existing lines in the project vicinity. As shown in Table 4.12-5, development of the proposed project would increase demand on the City's water supply by approximately 142,035 gallons per day. The demand for water in urban residential settings is lower than the demand for suburban residential use due to the increase in the square footage of landscaped area in a typical suburban residence. Therefore water consumption rates for the West Gateway project will tend toward the urban residential uses with common area landscaping.

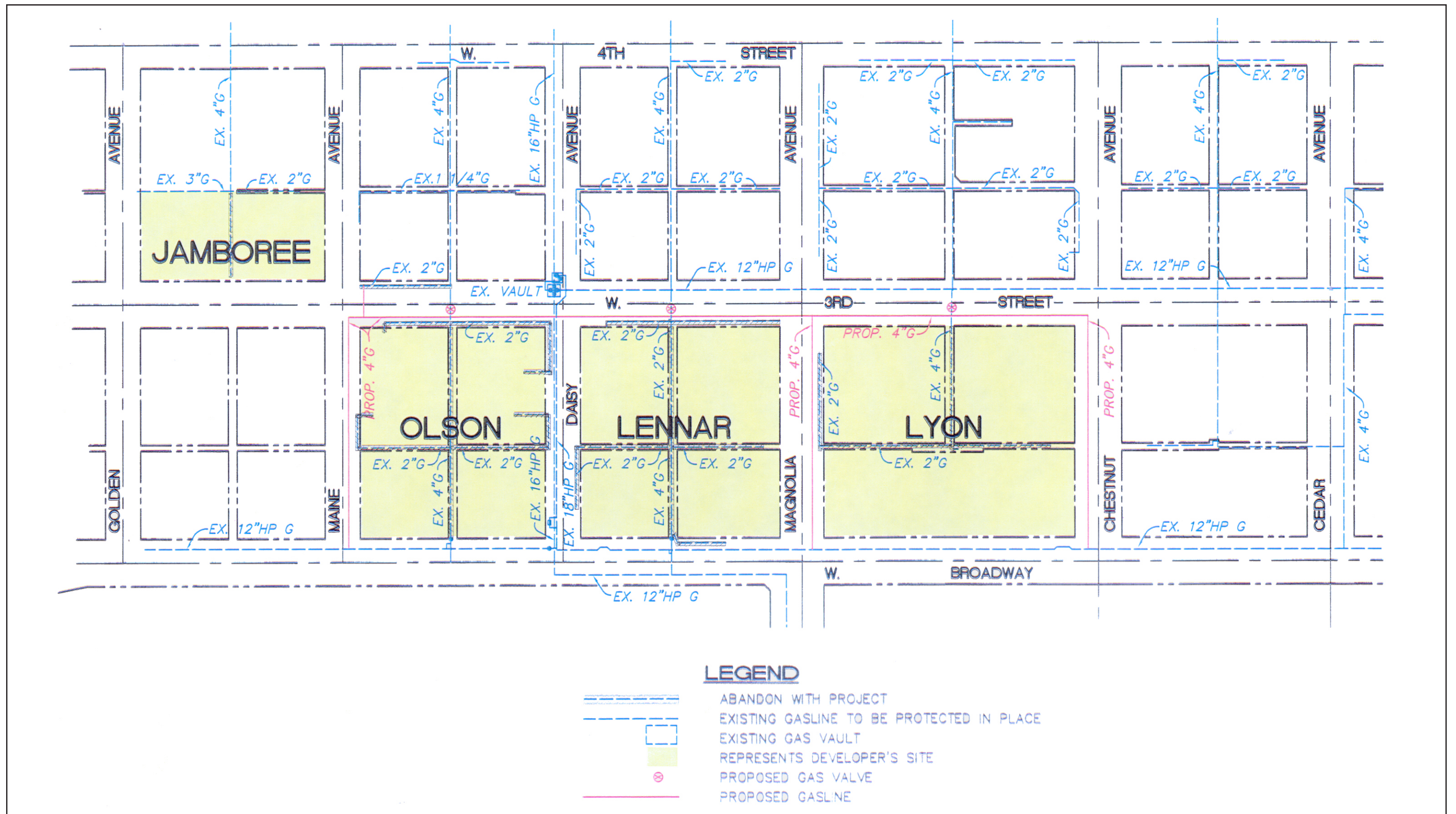


Figure 4.12-2
Natural Gas Facility Improvements

**TABLE 4.12-5
WATER CONSUMPTION FOR THE WEST GATEWAY PROJECT**

Land Use	Estimated Project Development	Consumption Rate	Total Consumption gallons/day
Residential – Condo/Apt:	787	162 gallons/day/dwelling unit	127,494
Residential – 1 Bdrm/Studio	66	101 gallons/day/dwelling unit	6,666
Retail/Commercial	15,000 sq. ft.	105 gallons/day/200 sq. ft.	7,875
Total Estimated Water Consumption (gd)			142,035

Source: Cotton/Bridges/Associates, 2004.

As stated above, the City relies on a majority of its water supply from groundwater. Project development, however, would not deplete groundwater supplies or interfere with groundwater recharge. Existing entitlements, both from the City's groundwater and from Metropolitan, are considered adequate to meet anticipated future demand in the City of Long Beach. On-site improvements and connections to the City's water system facilities would be provided by the applicant. Figure 4.12-3 shows the water distribution connections for Parcels 9, 10 and 11.

In addition, State-mandated water conservation measures, including ultra low-flow toilets, urinals, and taps, water-conserving plumbing, and other required conservation measures would be utilized as required in the City's Building Code to reduce the amount of water used. As a result, expansion of existing or construction of new water facilities, or new entitlements to serve the proposed development would not be necessary. Although the Initial Study identified potentially significant impacts to water resources, the water demand for the West Gateway project will not be significant because the City is able to meet the water demand of the project. Therefore, the proposed project would not result in a significant adverse impact on water resources.

Wastewater

The wastewater flow originating from the West Gateway area will discharge into local sewer lines operated by the City of Long Beach and then conveyed to the DeForest Avenue Trunk Sewer located in the right-of-way along the west side of the Long Beach Freeway (I-710) at Broadway and operated by County of Los Angeles Sanitation Districts (District). This 36-inch diameter trunk sewer has a design capacity of 20.2 million gallons per day (mgd) and conveyed a peak flow of 5.7 mgd when last measured in 2003.

Once wastewater reaches the trunk, it is conveyed to and treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a design capacity of 385 mgd and currently processes an average flow of 321.7 mgd. Table 4.12-6 below shows the estimated wastewater generation for the project. Wastewater generation was calculated using rates estimated by the City of Los Angeles. The assumption for wastewater generation in an urban setting reflects a low on site water retention rate due to a much smaller per residential unit landscaped area. For discussion on drainage and runoff treatment, refer to Section 4.6 (Hydrology and Water Quality).

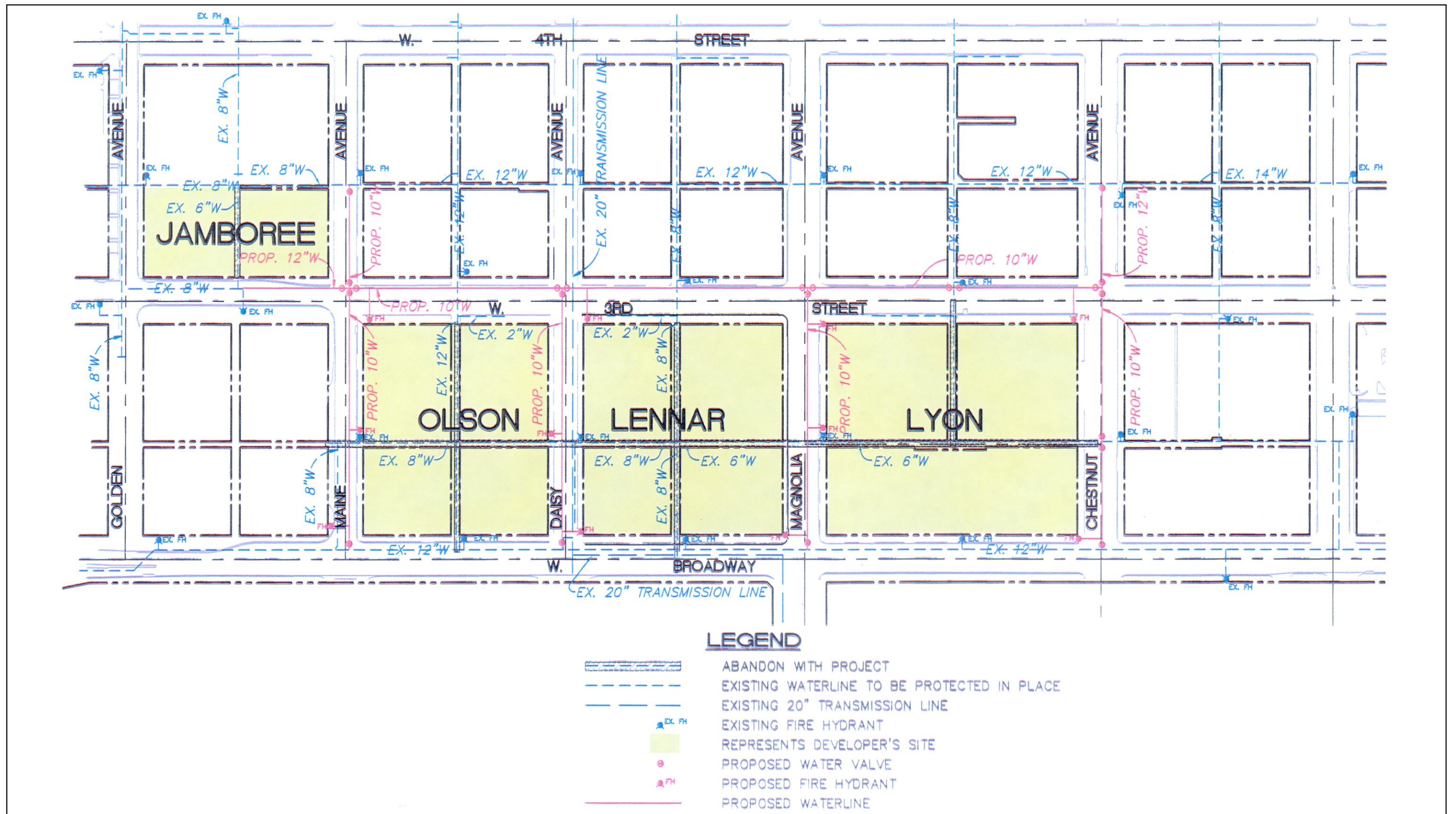


Figure 4.12-3
Water Distribution Facility Improvements

**TABLE 4.12-6
ESTIMATED WASTEWATER GENERATION**

Land Use	Estimated Project Development	Wastewater Generation Rate	Wastewater Generation (gallons/day)
Residential – Condo/Apt:	787	160 gallons/day/dwelling unit	125,920
Residential – 1 Bdrm/Studio	66	100 gallons/day/dwelling unit	6,600
Retail/Commercial	15,000 sq. ft.	100 gallons/day/200 sq. ft.	7,500
Total Estimated Wastewater Generation (gd):			140,020

Source: City of Los Angeles Draft L.A. CEQA Thresholds Guide, pp. K.2-22 (May14, 1998).

Existing facilities should be able to accommodate this wastewater generation. However, developers of the project sites will be required to pay applicable trunk and tie-in fees and will be required to upgrade any local lines as required by the City of Long Beach. Although the Initial Study identified impacts to wastewater facilities as a potentially significant impact, the analysis shows that the existing facilities have enough capacity to accommodate the West Gateway development and impacts will be less than significant with the payment of applicable fees and coordination with the City.

Solid Waste

The introduction of 853 residential units and 15,000 square feet of ground-floor neighborhood-serving commercial uses would result in an increase in the generation of solid waste on the site the future solid waste generation estimates for the proposed project are provided in Table 4.12-7.

**TABLE 4.12-7
ESTIMATED SOLID WASTE GENERATION**

Land Use	Estimated Project Development	Generation Rate (pounds per day)	Waste Generated (pounds per day)
Residential	853 units	7 lbs/unit/day	5,971
Commercial	15,000 sq. ft.	3.12 lbs/100 sf/day	468
Total Estimated Solid Waste Generation (pounds/day)			6,439

Source: Approximations based on new residential development, CBA, (2005).

As shown, approximately 6,439 pounds per day (3.22 tons per day) of solid waste would be generated by the proposed project. Solid waste collected by the City is currently transported primarily to the SERRE or to one of the 11 landfill facilities that the City of Long Beach uses for solid waste disposal. As shown in Table 4.12-7 above, these landfills currently accept a combined total of 69,840 tons of solid waste per day (31.17 tons per year).

The Initial Study identified solid waste contribution as potentially significant. However, the project's waste generation represents a small percentage of the total solid waste deposited daily at the various landfills that the City uses, and because the City would continue to implement existing waste reduction programs and would require new development in the City to comply with those programs, the impact of the proposed West Gateway project related to solid waste would be less than significant.

Communication Systems

Implementation of the proposed project would require connections to the new development on the project site for telephone and cable television and high speed internet service. All necessary on site communication systems improvements or connections would be properly and adequately designed and constructed. The proposed project may result substantial upgrades facilities in order to provide adequate service to the project site. Figure 4.12-4 shows the installation of cable and telephone facilities associated with Parcels 9, 10 and 11. However, mitigation measures provided below would ensure coordination with SBC prior to construction. Impacts related to the expansion of the communication system facilities would be less than significant with the mitigation provided below.

4.12.5 MITIGATION RELATED TO UTILITIES AND SERVICE SYSTEMS

Because there are impacts to public utilities and service systems on the site, the following mitigation measures are included to ensure that appropriate fees are paid for connection and expanded services for the new development and that coordination with public utility providers are maintained and that energy conservation measures are incorporated into the project design and construction.

- U-1 The Developer shall coordinate with the utility companies serving the site to establish service connections prior to construction.
- U-2 Any pre-existing underground utilities at the site shall be located prior to construction and abandoned or removed in accordance with state and local codes and regulations. Any utility trenches shall be backfilled under the observation and testing of the resident engineer or inspector.
- U-3 The Developer shall coordinate with SCE, SCGC and Long Beach Energy to incorporate energy savings programs in the construction and operation of the West Gateway project to ensure that energy savings technologies are incorporated into the design and operation of the project consistent with Title 24 of the Uniform Building Code.
- U-4 The Developer shall pay all applicable trunk and tie-in fees and upgrade any existing water or wastewater facilities on site as required by the City of Long Beach. Review of all site plans and utilities plans will be reviewed and approved by the City of Long Beach to ensure that adequate service and applicable codes are met.

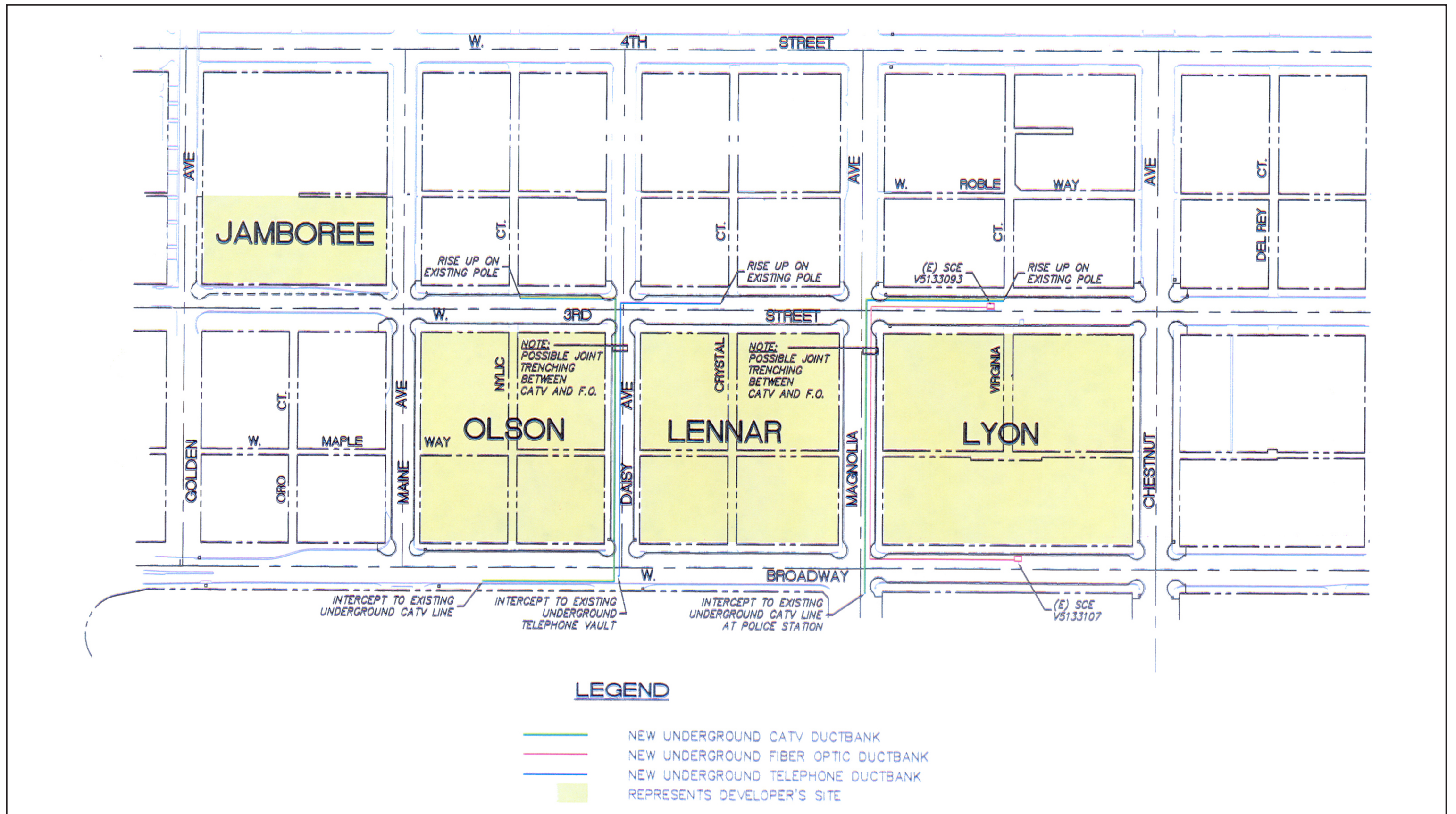


Figure 4.12-4
Dry Utilities Improvements

- U-5 The Developer shall pay its fair share of necessary telephone improvements including a main conduit structure to bring lines into the project site. Coordination with Verizon during the development stage would facilitate service connection.
- U-6 The Developer shall pay all applicable school impact fees in a manner meeting the approval of the Superintendent of the Long Beach Unified School District.
- U-7 Prior to issuance of building permits, the Developer shall create a disclosure form to be included with deed and title documents stating the following:

The property is located in the Long Beach Unified School District (LBUSD). Local schools (schools in close proximity to the property) may not have available capacity to accommodate additional students. If capacity is not available in local schools, then students that cannot be accommodated in local schools will be bussed to other schools in LBUSD with available capacity.

- U-8 The Developer shall pay applicable fees for the provision additional fire and police services to the site in a manner acceptable to the City of Long Beach Fire Chief and Police Chief.

4.12.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION RELATED TO UTILITIES AND SERVICE SYSTEMS

Implementation of the mitigation measures listed above would reduce potential utility and service system impacts to below a level of significance in all areas except for schools.

The payment of development impact fees, as required by mitigation measure U-6 and state law, would provide the funding to mitigate impacts of students generated by the West Gateway project. However, as indicated in the LBUSD letter, the school impact fee will not completely mitigate the impact to the school district due to the increasing costs associated with opening new schools in urban areas. Therefore, impacts related to schools would be mitigated by the school impact fees, however impacts would be considered significant unavoidable because the existing schools in Downtown Long Beach lack capacity without the project.